

TAMROCK USA, INC.

MACHINE/ELECTRICAL CHECKLIST

Make and Model No. EJC 544-MV4
Machine Type Utility Vehicle
MSHA Approval #31-128

If an MSHA Part 36 approval plate has been affixed to this machine, it must meet the requirements of Part 36, Title 30, Code of Federal Regulations. It is the responsibility of the user to ensure that this machine is maintained in permissible condition in accordance with this checklist

(WEEKLY) WHERE SHOWN ON THE FOLLOWING PAGES, DESIGNATES
THOSE INSPECTION CHECKS THAT MUST BE PERFORMED DURING THE
WEEKLY MAINTENANCE EXAMINATION IN ACCORDANCE WITH 30 CFR
SECTION 75.1914.

ALL INSPECTIONS AND TESTS SHALL BE PERFORMED IN FRESH AIR

PERMISSIBILITY:

1. For a complete permissibility evaluation this checklist must be used in conjunction with a power system checklist.
2. The design of the exhaust conditioner limits permissible operation to grades not exceeding 32%.
3. Due to braking capability limitations, this machine shall not be operated on grades greater than 32%.
4. The approval plate specifies a ventilation rate of 8,000 cfm.

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A. **FUEL SYSTEM:**

(WEEKLY) 1. () There are no fuel leaks.

(Weekly) 2. () The fuel filler cap (1)* is vented and the vent is not plugged. (See FIGURE 1).

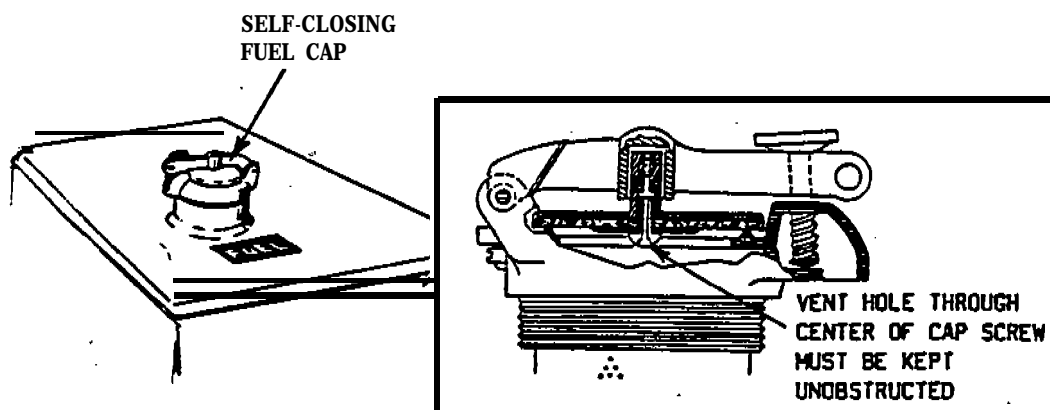


FIGURE 1

(WEEKLY) 3. () The fuel filler cap is self-closing and is attached to the tank in a manner which will prevent loss during refueling.

(WEEKLY) 4. () Auxiliary fuel tank capacity has not been added to the vehicle.

(WEEKLY) 5. () Fuel filters (2)* are properly installed and are not damaged.

(WEEKLY) 6. () The fuel injection rate adjustment mechanism (3)* and the engine governor setting are locked and sealed (see Figure 2).

(WEEKLY) 7. () The fuel shutoff valves (4)* in the fuel supply line are operable.

(WEEKLY) 8.() The drain plug (5)* in the fuel tank is locked in position. (Pipe plugs are considered "locked in position" when tight).

*Referenced items shown on Machine Layout Diagram.

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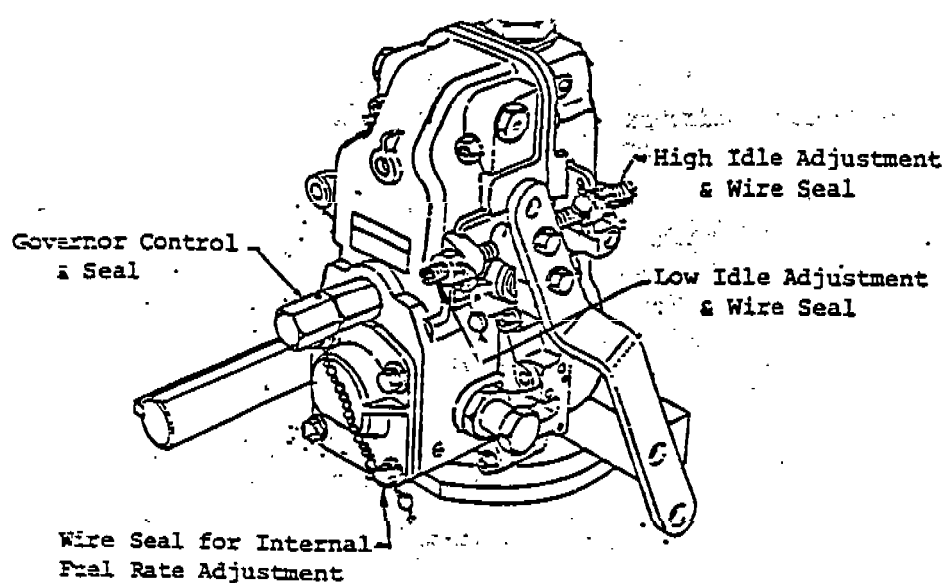


FIGURE 2 - SEALED ENGINE ADJUSTMENTS

(Weekly) 9. () Fuel lines are not routed near or connected to hot exhaust components and are protected from external damage.

(Weekly) 10. () Fuel lines are secured.

B. BRAKING SYSTEM:

WARNING: Brake tests are to be conducted on a relatively level surface away from traffic areas where other machines or persons maybe moving about. Consider the possible consequences of testing a machine with assumed braking inadequacies and select an area where the test machine would not cause an accident due to these inadequacies.

- (WEEKLY) 1. () Service Brake Test.
- a. With the engine operating and the machine stationary, apply the service brake.
 - b. Release all other brakes.
 - c. Place the transmission gear selector in first gear and the directional control selector in forward or reverse.
 - d. Depress the accelerator to full throttle, allowing the engine to put the transmission torque converter into a stall condition.

If the service brake is operating satisfactorily, the unit will not move when the above procedure is followed. If movement is detected, the service brake must be repaired or adjusted.

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(WEEKLY) 2. () Parking Brake Test.

- a. With the engine operating and the machine stationary, apply the parking brake (6)*.
- b. Release all other brakes.
- c. Place the transmission gear selector in first gear and the directional control selector in forward or reverse.
- d. Depress the accelerator to full throttle, allowing the engine to put the transmission torque converter into a stall condition.

If the parking brake is operating satisfactorily, the unit will not move when the above procedure is followed. If movement is detected, the parking brake must be repaired or adjusted.

C. **Electrical LIGHTING SYSTEM:**

ALL ELECTRICAL ENCLOSURES MUST MEET THE FOLLOWING

- (Weekly) 1. () All electrical enclosures (i.e., alternator (7)*, headlight switch (8)*, headlight (9)* have an MSHA plate attached that is clearly stamped with an MSHA certification number.
- (WEEKLY) 2. () All electrical enclosures are securely mounted and all vulnerable electrical components are protected from physical damage.
- (WEEKLY) 3. () All electrical enclosures are intact (not cracked or broken); the headlight lenses are not loose. All shaft and/or pushbutton controls are operable.
- (WEEKLY) 4. () All threaded, covers are secured from loosening by a locking screw, wire, or other means.

*Referenced items shown on Machine Layout Diagram.

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- (WEEKLY) 5. () Lockwashers or equivalent devices are provided for all bolts, screws, or studs that secure parts of the explosion-proof enclosures. All bolts, screws, and studs are in place and tightened.
- (WEEKLY) 6 () None of the fastenings used for joints on the explosion-proof enclosures are used for attaching non-essential parts or for making electrical connections.
7. () All joints forming the flame arresting paths (flanges and covers) are smooth and free from rust, corrosion and pitting.
- (WEEKLY) 8. () Use feeler gauges of the appropriate size to insure the clearances in all accessible flame path joints, between the enclosures and corresponding covers, are not exceeded.
- (WEEKLY) 9. () Headlight(s) is/are installed at each end of the machine and operable.
- (WEEKLY) 10. () Headlight switch must not control or operate any electrical circuits other than headlights.
- (WEEKLY) 11. () AU lead entrances (packing glands) are assembled so that the cable jacket penetrates into the enclosure and when tightened, 1/8" minimum clearance remains between the packing nut and stuffing box. All packing nuts and stuffing boxes are secured from loosening by a locking screw, wire, or other means.
- (WEEKLY) 12. () All unused lead entrances are closed with metal plugs which are secured in place by spot welding, brazing, or equivalent.

CABLES CONNECTING ELECTRICAL COMPONENTS MUST CONTINUE TO BE:

- (WEEKLY) 13. () Clamped in place to prevent undue movement.
- (WEEKLY) 14. () Protected from mechanical damage by position flame resistant hose conduit, metal tubing, or troughs.

NOTE: Flexible or threaded rigid metal conduit is not acceptable.

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- (WEEKLY) 15. () Not subject to abrasion from sharp comers or edges.
- (WEEKLY) 16. () Isolated from hydraulic lines and hydraulic components.
- (WEEKLY) 17. () Isolated from fuel lines.
- (WEEKLY) 18. () Flame resistant if not enclosed in hose conduit. This is indicated by "MSHA" markings on the cable.
- (WEEKLY) 19. () If hose conduit is used, it must be securely clamped at both ends and MSHA markings appears as "Flame-Resistant, US MSHA, US MESA or USBM 2G-XXX".

NOTE: The following check maybe performed when an electrical enclosure has been disassembled for whatever reason or if there is cause to believe a problem exists within the enclosure.

- 20. () Provided with short circuit protection for each power conductor.
- 21. () Electrical connections inside the electrical enclosures are secure (not loose) and are insulated where space is limited. The ground conductors are not broken and are securely attached.

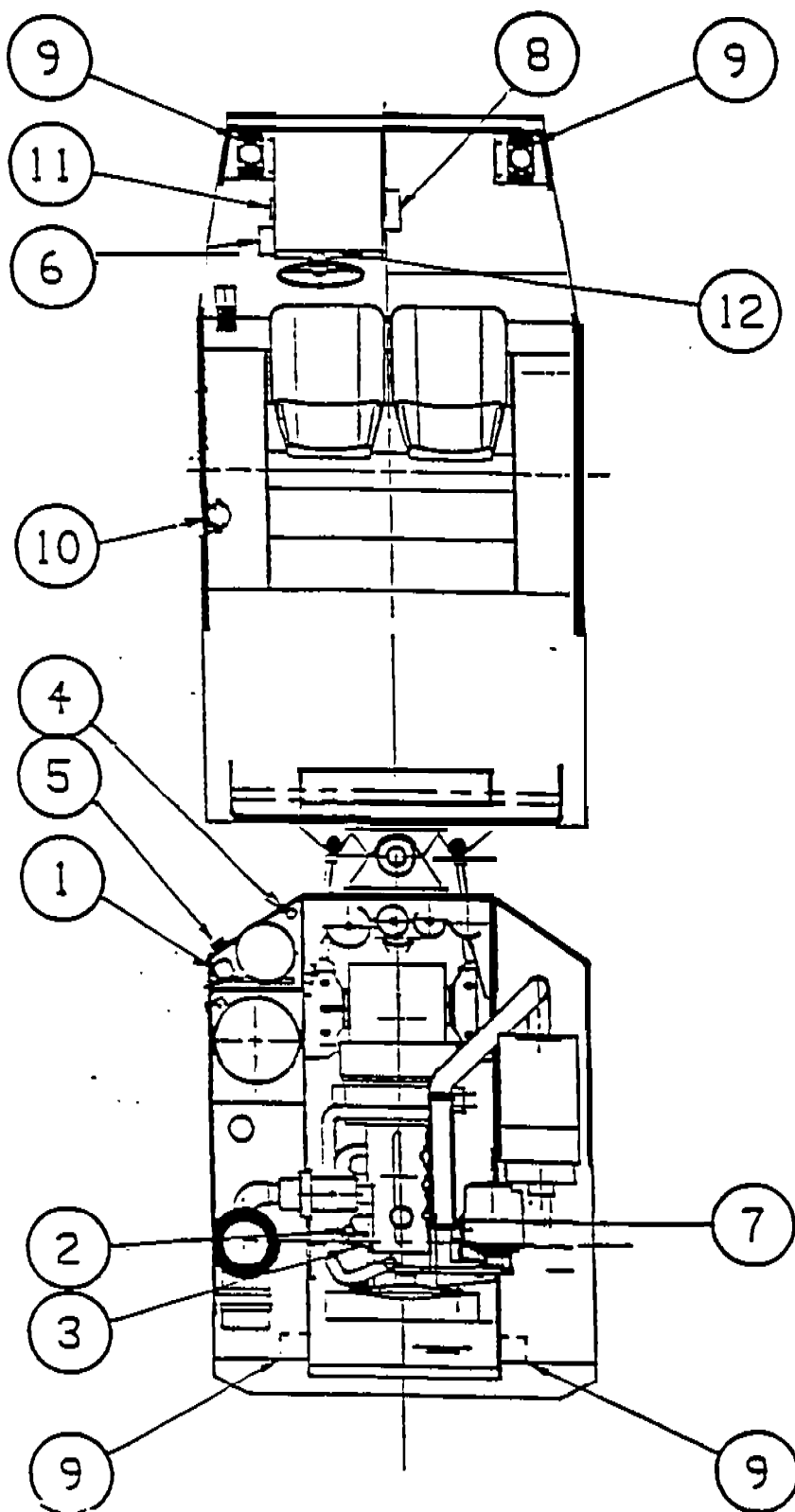
D. **MISCELLANEOUS:**

- (WEEKLY) 1. () The machine is equipped with at least one 5 lb. Dry chemical fire extinguisher (10)*. AU fire extinguishers are fully charged.
- (WEEKLY) 2. () For machines equipped with an air system the main air pressure gauge in the operator's compartment is operable.
- (WEEKLY) 3. () The machine. has an MSHA Part 36 approval plate (1 1)* attached to it in the operator's compartment.
- (WEEKLY) 4. () The engine will not turn over unless the directional control selector is in the neutral position.
- (WEEKLY) 5. () The exhaust diffuser at the scrubber outlet is installed.

*Referenced items shown on Machine Layout Diagram

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MACHINE LAYOUT DIAGRAM



- 1-Fuel Filler Cap
- 2-Engine fuel Filter
- 3-Fuel Injection Rate Mechanism Engine & Governor setting.
- 4-Fuel Shut-off Valve
- 5-Fuel Tank Drain Plug
- 6-Park Brake Control
- 7-Alternator
- 8-Head Light Switch
- 9- Head Light
- 10-Fire Extinguisher
- 11-MSHA Approval Plate
- 12-Engine Stop Valve

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